



MONTANA AERONAUTICS COMMISSION

Volume 21—No. 3

March, 1970

PRITZL SELECTED REGIONAL SAFETY AWARD WINNER

John Pritzl, winner of the FAA's Aviation Mechanic Safety Award for the state of Montana has been selected as FAA's Central Region winner. Pritzl, chief mechanic of the helicopter division of Johnson Flying Service, Missoula, recently received the following telegram:

"Congratulations you have been selected as the FAA Central Region 1969 general aviation mechanic safety award winner. The selection was based on your record of professional competence and contribution to aviation safety through maintenance practices.

In the near future you will receive details of the award ceremony. Your contribution will be entered in competition with other FAA Regional winners for the national award.

We wish you success in the national competition. Congratulations to Johnson Flying Service as employer of the 1969 FAA Central Region General Aviation Mechanic Safety Award Winner."

Edward G. Marsh, Dir.
FAA Central Region
Kansas City, Mo.

John is the first Montanan to receive the Regional Award since the inception of the program in 1963.

We add our wishes for John's success in the national competition and our heartiest "Congratulations" for winning the Regional Award.

MAC NAMES BILL HUNT DIRECTOR

The Montana Aeronautics Commission at its February 11th meeting, named William E. Hunt the new Director succeeding Charles A. Lynch.

Mr. Lynch, recuperating in Great Falls from the aircraft accident of last September, was retained as Commission Advisor.



Director William E. "Bill" Hunt.

Mr. Hunt is a native of Tacoma, Washington, and attended the University of Montana. While serving with the United States Army during World War II, he participated in "D" Day landings in North Africa, Sicily, Italy and Normandy.

Following graduation from the University of Montana's Law School, Mr. Hunt was employed by the United States Army corps of Engineers and

has 12 years of private law practice experience. He has served municipal, county, state and federal governments including the positions of Deputy County Attorney for Hill County; County Attorney for Liberty County and Mayor of Chester as well as attorney for the corps of Engineers.

He has been an active member of a number of civic and professional organizations, serving as Executive Director of the Greater Marias — Milk River Development Association; all states Post Commander (1963) for the Veterans of Foreign Wars; member of the American Bar Association; member of the Montana Bar Association serving two terms as Judicial Vice-President, 12th Judicial District; Chairman of the North Central Montana Circuit Rider Committee and member of the Board of Trustees of the North Central Montana Boy Scout Council.

Like most Montanans, Mr. Hunt spends his free time enjoying hunting, fishing and playing golf.

Mr. Hunt, wife Mary, three sons, James G., 16, Joseph R., 15; and William E., 4; and twin daughters Catherine and Patricia, age 13, reside at No. 1 Wood Court in Helena.

Director Hunt issued the following statement: "As Director, I intend to do as much for aviation as possible and work closely with the skilled and competent staff of the Montana Aeronautics Commission to support aviation and people engaged in aviation

(Continued on Page 2, Col. 1)

Official Monthly Publication
of the
**MONTANA AERONAUTICS
COMMISSION**
City/County Airport
Box 1698
Helena, Montana 59601
Forrest H. Anderson, Governor
William E. Hunt, Director

Clarence R. Anthony, Chairman
Jack R. Hughes, Vice Chairman
James A. Steffeck, Secretary
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John Hebbelman, Jr., Member
Dr. B. P. Little, Member
David Matovich, Member



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Editor: C. Joyce McCutcheon



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DIRECTOR . . .

(Continued from Page 1, Col. 3) in the state of Montana. The office will continue to be a source of information and any help that is requested by anyone interested in Montana and Montana aviation. Contacts will be maintained with persons interested in municipal, county, state and federal aviation."

MR. LYNCH IMPROVES

Mr. Charles A. Lynch has been moved from Columbus Hospital to a rehabilitation and therapy center in Great Falls. Mr. Lynch is showing marked improvement through the full schedule of therapy and for persons wishing to visit or contact him, the present address is:

Park Place Nursing Home
15 Avenue South and 32nd
Great Falls, Montana 59401

To pay the interest on the national debt for just one minute takes the federal taxes of 28 average families.



CALENDAR

March 2-12, Mexico Tour—"Mexico by Private Plane in 1970".

March 4 & 5, Bozeman—Montana Aviation Trades Association and the Montana Airport Management Association combined annual meeting. Headquarters—Baxter Hotel.

March 18 & 19, Helena—Montana Aeronautics Commission Monthly Meeting.

March 19-21, Seattle, Washington—National Aerospace Education Council Meeting.

March 20 & 21, Huron, South Dakota—12th Annual North Central Aerial Agricultural Convention. All aerial applicators are invited to attend.

April 6-16, Mexico Tour—"Mexico by Private Plane in 1970".

April 7 & 8, Washington, D. C.—NASAO Spring Conference.

April 14-17, Washington, D. C.—Second annual government/industry National Aviation System Planning Review Conference. Secretary of Transportation, John A. Volpe and FAA Administrator, John H. Shaffer, will speak at the opening session where the keynote will be the need for an integrated transportation system. Following the session, there will be seminars where the conferees will focus on issues relating to the policies and plans for the National Aviation System.

April 17, 18, & 19, Billings—Montana Inventors Congress to be held at the Shrine Auditorium sponsored by the Associated Inventors of Montana; Billings Convention and Visitors Bureau; Montana Chamber of Commerce and the State Department of Planning and Economic Development.

April 30-May 2, Greer, South Carolina—Greenville-Spartanburg Jetport—Second Annual Southeastern Aviation Trade Mart.

May 3, Big Timber—Airport Dedication.

May 7-9, Bozeman—The National Inter-Collegiate Flying Association will hold their annual national meet at Gallatin Field.

May 11-14, Las Vegas, Nevada—American Association of Airport Ex-

ecutives Meeting.

May 15, 16 & 17, Miles City—Montana Pilot's Association's Annual Convention. (Watch for further details).

June 12, 13, 14, Vergennes, Vermont—National Pilots' Association Annual Summer Fly-In Weekend. Members and Non-Members invited.

June 15-July 10, Dillon—Western Montana College Teachers Aerospace Course.

June 20, Great Falls—International Aviation Council's Spring Board Meeting.

June 27 & 28, Billings—Air Fair sponsored by the Billings Junior Chamber of Commerce, starring the U. S. Navy's Blue Angels.

July 6-24, Helena—Carroll College, Teachers Aerospace Course.

August 1 & 2, Ekalaka—Annual Fly-In sponsored by Billings MPA Hangar.

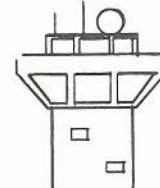
September 10, 11 & 12, West Yellowstone—International INAC Convention.

STATISTICS

Will your first accident be your last day alive?

61/37
65/22
78/18
69/18
56/19
57/31
6/6

ACCIDENT		TOTAL FATALITIES
1964 Total	61	37
1965 Total	65	22
1966 Total	78	18
1967 Total	69	18
1968 Total	56	19
1969 Total	57	31
1970 To-Date	6	6



TOWER

OPERATIONS

	Total Operations	Instrument Operations
Billings	7,428	2,137
Great Falls	6,154	1,765
Missoula	4,167	617
Helena	3,051	648

Letters to the Commission

A. O. Pemberton
Broadus, Montana
Feb. 19, 1970

Mr. Dave Kneedler
Airport Engineer
Aeronautics Commission
Helena, Montana

Dear Dave:

Sorry to be so late in answering your letter of January 1st relative to the cost of installing our H Marker at the Broadus Airport.

As you know we elected to provide the antenna poles, do the ditching and installing of the poles in lieu of paying the \$1,500.00. Our total cost was considerable less the way we chose to do. The cost of the poles set in place with all of the necessary hardware installed amounted to \$240.24. Cost of paint, brushes, pails, etc. less than \$75.00. All of labor was donated as was the ditching and covering of the wire. We did not have any extra cost involved in getting the electric power to serve the unit as our monthly bill took care of the stub line into the unit.

I would like to tell you fellows what a fine job you are doing for the commission and the service you are rendering to airports such as ours. You have certainly been more than willing in helping us get our equipment installed. The H Marker is working in good manner and we are more than pleased with our new lighted wind-sock and with our new hard surfaced runway, new lights, and good tie-down area we feel we are able to amply serve air traffic into Broadus. I do think that the gears should be put in motion to endeavor getting a VOR at Broadus. I feel it should be put on the "must" list as soon as possible. (Notice that Gillette has one installed).

Hope that these figures relative to the H marker will be of some help to you.

Sincerely yours,
A. O. Pemberton.

HELIPORT AT CUT BANK CLOSED

Notice is hereby given that the heliport at the Memorial Hospital in Cut Bank will be closed immediately and will remain closed until further notice.

MONT. - S. F. SERVICE IMPROVEMENT RECOGNIZED BY CAB EXAMINER



By TAP, Inc.

Numerous Montana cities as well as the Montana Aeronautics Commission recently appeared and testified before the Civil Aeronautics Board in Salt Lake City concerning CAB Docket #19685. The main purpose of this testimony was to document the need for and express interest in improved service between Montana cities and Salt Lake City to beyond points in California.

It was strongly pointed out at the hearing that Salt Lake City is indeed a key gateway city for a large amount of Montana air travel. There was also considerable statistical evidence presented to support the conclusion that California is a key state to Montana in terms of air transportation. It was carefully documented that traffic growth between Montana cities and Salt Lake City and California can be expected to grow even more rapidly with improved service.

The Montana Aeronautics Commission as well as individual communities of Montana clearly demonstrated their dedicated support to improved air service to Salt Lake City and beyond to San Francisco by their exhibits and testimony in this case. The recently completed state air survey by TAP, Inc. for the Montana Aeronautics Commission lists the need for improved service between Montana and California as a top priority item.

The initial decision of the examiner has been issued in this case. The only award in the proceeding which would have direct bearing upon Montana cities would be the removal of certain restrictions of Western Airlines in their present certificate to serve in the Salt Lake City-San Francisco market.

Frontier Airlines also applied for direct service from certain Montana points to the San Francisco Bay Area in this proceeding but no award was recommended for Frontier by the examiner in his initial decision.

Prior to this proceeding, Western

Airlines was not allowed to provide through-plane or one-plane service beyond Salt Lake City from San Francisco north into Montana. This authority is not included as part of their Civil Aeronautics Board certificate. Therefore, Western is not able to provide one-plane service between San Francisco and their Montana cities via Salt Lake as they are able to do with the Los Angeles market. It is our understanding that if this restriction is lifted in accordance with the examiner's initial decision, Western Airlines would be in a position to provide improved service between certain Montana cities and San Francisco.

Compiled by TAP, Inc., Bozeman, Montana, Retained Economic Consultants for MAC on scheduled air transportation matters.

NIFA REGISTRATIONS INCREASE

Twenty colleges have registered for the National Inter-Collegiate Flying Association's Annual Meet to be held in Bozeman, May 7, 8 and 9. A total of 35 to 40 Colleges are expected to participate, drawing some 400 participants from across the United States and Canada.

The contestants will complete in four contests:

- I. Power On and Power Off Landings.
- II. Bomb Drops.
- III. Cross Country Navigational Events.
- IV. Simulator Instrument work.

The meet will include numerous Aerobatic and Industrial Displays.

The Flying Farmers and Ranchers will host a barbecue on the 7th.

The public is invited to attend a dinner for the visiting faculty, advisors and business representatives hosted by MSU's Acting President, William Johnstone.

A number of visiting dignitaries from various branches of the Aviation Industry will be attending and participating in the Awards Banquet on the evening of May 9th.

All aviation interested persons are urged to attend the meet and watch these excellent young pilots compete for national awards and trophies.

NEW UNICOM

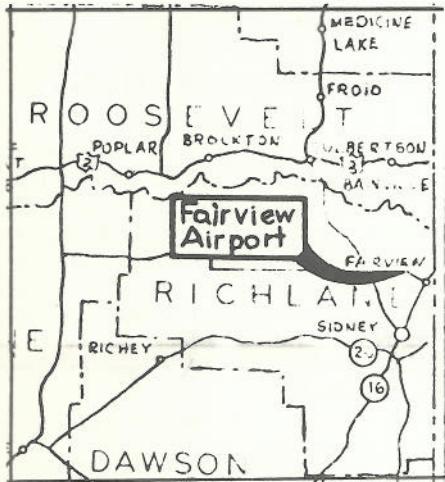
123.0 MC Lewistown
Located at Skycraft.

AIRPORT NOTES



By JAMES H. MONGER
Assistant Director, Airports

Fairview — Bids for construction will be advertised in the next few weeks for the Fairview Airport. The planned airport is a MAC and Richland County project and has been under supervision of Consulting Engineer E. N. Wheeler of Sidney.



Location of planned airport at Fairview.

Polebridge — The MC Quarter-Circle Ranch airstrip located north of Polebridge on the North Fork of the Flathead River will remain open for traffic this summer. The National Park Service is now in the process of acquiring the ranch property from the McFarland's, but the title transfer has not as yet been accomplished. It is assumed that even after the Park Service takes over the ranch, the airstrip will remain open to the public for the duration of the lease. There are no facilities available for flyers at the airstrip.

Yellowstone/Glacier — National Park Service officials have notified the MAC that at the present time there are no construction monies available for either runway or airport construction at either Yellowstone or Glacier. The Park Service is pursuing land acquisition at the location of the proposed East Glacier Airport.

MONTANA SCIENTISTS DEVELOP NEW FIRE-FIGHTING DEVICES

The airplane has long played an important part in the detection and fighting of forest fires. But now two new experimental devices developed by scientists at the National Forest Fire Laboratory in Missoula, promise to uncover very small lightning-caused fires long before they become a real threat to valuable timberland. A log hit by lightning, for example, can smolder undetected by ordinary fire detection methods for days before setting off a full scale forest fire.

One device is an airborne infrared scanner or heat sensor that can detect a hot spot as small as one foot square from altitudes up to 20,000 feet. (The best results are obtained between 2,000 and 8,000 feet.) The scanner is connected with a "target discrimination module," a rapid film processor, and a navigational aid that gives instantly the exact position of the plane. Technicians aboard compare the infrared film with a map of the area and pinpoint the location of the hot spot picked up by the scanner. As Keith Burris, writing in the Beechcraft Altimeter, puts it, "The infrared scanner . . . locates the haystack and smaller, similar devices mounted on light aircraft find the needle." The latter must determine if the hot spot is, for example, a locomotive, machinery working the area, or a fire.

The second experimental device is an airborne lightning detector which can pick up lightning 100 miles away. "Dry lightning" not associated with rainstorms, is a special threat to large, densely forested areas in Alaska. Because of the extent of the threatened area, a 500 mph Lear jet was used in dry lightning detection last summer. With its speed and ability to fly at 40,000 feet, this plane is particularly suited for detecting fires caused by dry lightning over extensive areas.

With these new airborne devices, lightning-caused fires will be easier to find and control. Forest fires caused by human beings, though, will still remain a problem. (Reprinted from the January, 1970 issue of NAEC's Skylights.)

MONTANA INVENTORS CONGRESS

The Montana Flying Farmers and Ranchers have tentative plans for a Fly-In to be held in conjunction with the annual Montana Inventors Congress which will be held in Billings on April 17, 18 and 19 at the Shrine Auditorium.

In addition to the inventors show an industrial exposition of products manufactured in Billings and the surrounding area will be held.

Sponsoring this year's event are the Association Inventors of Montana; Billings Convention and Visitors Bureau; Montana Chamber of Commerce and the State Department of Planning and Economic Development.

At the banquet on Saturday evening awards will be given for the first, second and third best inventions in each of the following 10 classifications:

1. Agriculture
2. Automotive and mechanical
3. Commercial and industrial
4. Electrical
5. Household
6. Novelty and specialty
7. Merchandise
8. Sports, recreation and toys
9. Tools
10. Miscellaneous

Efforts are being made for manufacturers and inventors from surrounding states to participate in the show. Entry forms and detailed information are available through local Chamber of Commerce offices.

The public is invited to attend the Congress.

FEDERAL AVIATION ADMINISTRATION ITINERARY LISTING

Airport	Mar.	Apr.	May
Culbertson			8
Glasgow		4	6
Glendive	19		21
Great Falls	5	2	7
Lewistown		22	
Miles City		23	
Missoula	19	23	21
Sidney	18		20

NOTE: Provisions have been made to give private, commercial and flight examinations **ON AN APPOINTMENT BASIS ONLY** at the following FAA Flight Service Stations:

Bozeman	Lewistown
Butte	Livingston
Cut Bank	Miles City
Dillon	Missoula

Great Falls

NOTE: Until further notice GADO #1 in Billings will be open the third Saturday of each month **ON AN APPOINTMENT BASIS ONLY**.

CONGRATULATIONS



FAA CERTIFICATES ISSUED RECENTLY TO MONTANA PILOTS

PRIVATE

Tracht, Lloyd H.—Kalispell
Jardee, Gary E.—Mill Iron
Henderson, Charles G.—Hall
Fennessy, Michael F.—Libby
Schaefer, Karl J.—Missoula
Hestekin, Bryan M.—Corvallis
Skinner, Timothy B.—Great Falls
Laas, James A.—Kalispell
Worrall, Glen E.—Loma
Morgan, James T.—Austin, Texas
Lohner, Hubertus—Livingston
Fellows, Charles E.—Lodge Grass
Hirsch, Alvin—Rock Springs
Giffin, Ronald D.—Billings
Borer, Harry F.—Forsyth
Hoffmeyer, Scott D.—Scobey

COMMERCIAL

Zuidema, William—Conrad
Caffyn, Thomas J.—Great Falls
Nixon, Larry E.—Great Falls
Scribner, Leonard H.—Geraldine
McDermott, John K.—Billings

ATR

Morris, Philip J.—Singapore
Johnson, Richard A.—Tucson, Ariz.
Bunkowske, Alvin W.—Rapid City,
S. D.
Edward, John B.—Billings

INSTRUMENT

Tubbs, William J.—Helena
Borchers, Louis F., Jr.—Great Falls
Morris, J. Andre—Twin Bridges
Smith, Thomas A.—Ranburne, Ala.
Stevens, Marcus H.—Ashland
Hanson, Harold S.—Billings
Patrick, Ralph H.—Rudyard
Ringling, Paul T.—Miles City
Starr, Charles E.—Hayden Lake, Ida.

MULTI-ENGINE

Starr, Charles E.—Hayden Lake, Ida.

FLIGHT INSTRUCTOR

Watson, Bernard M.—Honolulu,
Hawaii

Nish, Robert M.—Judith Gap
Darkenwald, Daniel A.—Billings

FLIGHT INSTRUCTOR INSTRUMENT

McCann, Monte E.—Conrad

BASIC GROUND INSTRUCTOR

Urbach, Daniel D.—Bozeman

INSTRUMENT GROUND INSTRUCTOR

Poletto, Danny A.—Great Falls
ROTOCRAFT - HELICOPTER
Rismon, Ronald L. (ATR)—Billings
Skaar, Harold L. (Com.)—Gillette,
Wyo.

FLIGHT INSTRUCTOR ROTOCRAFT-HELICOPTER

Rowe, Gary W.—Billings
Jeffers, William W.—Billings
Rismon, Ronald L.—Billings

AIRFRAME MECHANIC

Nydam, Andrew G.—Twin Bridges
Caraveau, Archie D.—Roberts

SENIOR PARACHUTE RIGGER (Back & Chest)

Bain, Stanley A.—Kalispell
Garfield, Kenneth V.—Kalispell
Goff, Daniel C.—Kalispell
Stillman, Theron J.—Kalispell
Tousey, Marcus P.—Kalispell

SO. DAK. TO HOLD

AERIAL AG. CONVENTION

South Dakota Aviation Trades Association president, Walter F. Ball, announces that the 12th annual North Central aerial agriculture convention will be held in Huron, South Dakota on March 20 and 21, 1970.

The convention will include an aerial applicator school, various subjects pertaining to general aviation and manufacturers of both personal and agricultural aircraft have been invited to display and demonstrate new aircraft at the Huron Airport during the convention.

All aerial applicators are cordially invited to attend this convention.

For further details, contact Kay Polad, Secretary of the SDATA, Box 18, Huron, South Dakota.

CANADIANS VISIT MAC OFFICES



Canadian guests with Airport Division personnel, Lt. to rt. Worthie Rauscher, David Kneedler; guests John Heads and Wesley Graham; James Monger and Vernon Moody.

Mr. Wesley Graham and Mr. John Heads of Winnipeg, Manitoba, Canada, visited the offices of the Montana Aeronautics Commission of February 10 and 11. Wesley Graham, Chief and John Heads, Director, are from the Economic, Business and Transportation Research Branch of the Department of Industry & Commerce for the Province of Manitoba. The Province desires to learn more about the operation of the State Department of Aeronautics with the thought that possibly a counterpart would someday be set up for Manitoba.

During their stay they were able to meet with the various members of the MAC staff and sit in on the

monthly meeting of the Aeronautics Commission. They were present during a meeting with the FAA and National Park Service regarding recreation airports adjacent to National Parks.

The gentlemen also visited the State Department of Planning and Economic Development while in Helena.

From Montana they went on to Bismarck to meet with the North Dakota Aeronautics Commission.

In 1968, more than 20,000 licensed pilots began to upgrade their flying skills under the new provisions of the GI educational benefits.

AVIATION EDUCATION HIGHLIGHTS



By DUANE JACKSON
Aviation Education Supervisor

Several Aerospace Education courses have thus far been arranged for teachers during the 1970 summer session. The present summer course sequence consists of three quarters, Level I, Level II, and Level III. These courses are offered alternating summers at different Montana colleges. The purpose of the longer sequence is to better prepare teachers to teach aviation and aerospace courses.

At present, courses have been arranged at Western Montana College in Dillon, at Northern Montana College in Havre, and at Carroll College in Helena. Possibly one additional course will be offered as an extension course through the University of Montana extension service. Courses previously offered at Eastern Montana College in Billings will not be available during the 1970 summer session.

The aerospace courses at Northern Montana College and Carroll College will be for graduate or undergraduate credit. Both courses will be Level I general survey courses, and will be three weeks long. The dates for the Carroll College aerospace course are from July 6 through July 24. The dates for the course at Northern have not been set. The aerospace course at Dillon will be Level III advanced course. A prerequisite for this course is prior attendance in an aerospace course or extensive aviation knowledge. The value of the aviation background will be determined by the instructor. The course at Western will run from June 15 through July 10, the first half of the summer session.

All courses are made possible by the support of the schools involved and the Aeronautics Commission. A limited number of partial scholarships which include flight orientation, are available to Montana teachers. Field trips in small aircraft within the state and possibly in a larger

aircraft to an aerospace facility outside of Montana will be arranged on a planes available basis.

For further information concerning the above programs contact the Deans of Education at the different schools or the office of the Aviation Education Supervisor, P.O. Box 1698, Helena, Montana 59601. Any interest in establishing a course at a school not listed above should be directed both to the Dean of Education at the school and to the Aviation Education Supervisor.

FAA INSPECTOR'S CORNER



By LAUREN D. BASHAM
Accident Prevention Specialist
GADO No. 9, Helena

WEATHER SENSE

At this writing, 1970 is not yet two months old and we have had two General Aviation accidents in western Montana. Both of these accidents, one of which was fatal, will undoubtedly have **weather** listed as a **cause** or **related** factor when the investigation is complete. An analysis on the weather type accident reveals one factor that stands out foremost time after time—pilots involved in a weather accident are taking off **into** or continuing **into** adverse weather conditions! They simply allow themselves to be caught!

Inadvertent entry into adverse weather too often results from either failure of the non-instrument rated pilot to obtain a thorough weather briefing before taking off or failing to make proper use of the information given him. Once entangled with the elements, unable to see the ground or horizon, the VFR pilot finds himself perched precariously on the horns of dilemma: what is straight and level and which way is up. Add to this dilemma the close proximity of high mountain ranges and the pilot's future can be counted in seconds.

What leads these pilots to press on despite obviously deteriorating conditions far exceeding their capabilities? Why will a mature pilot try to pit his inability against the known capabilities of weather?

Thinking individuals, whether they drive cars or fly aircraft, adopt and do in fact nurture the attitude of the professional. They **know** what they can do and cannot do safely under any set of circumstances. Their knowledge is based on an acute and honest appraisal of skill and training. With proper training and the use of good judgment, pilots can usually avoid weather beyond their capabilities and that of their aircraft.

It appears that the pilot who has no "Weather Sense", the pilot who has no respect for an atmospheric environment beyond his capabilities as a pilot, must certainly lack also certain elements of qualification for the basic pilot certificate—

He may be:

1. Ignorant of weather phenomena,
2. Ignorant of the dangers of weather.
3. Unaware of the services and facilities available to him for planning and carrying out a flight.

On the other hand, he may have blind faith in the forecaster and simultaneous get-home-itis. No self respecting forecaster would ever claim infallibility and he would be the first to say that the forecasts are only "probabilities" that do not always become fact. Limitations in the state-of-the-art in atmospheric sciences dictate the following fact . . . Even if there were a perfect observational system which describes the weather everywhere exactly as it is all the time, forecasts would still be inaccurate because of a lack of understanding of what makes weather and how it moves!

It is obvious then that the only recourse open to the pilot is for him to develop a "Weather Sense" or knowledge of those elements which will allow him to make safe and sane GO-NO-GO decisions. This "Weather Sense" includes not only knowledge of the limitations of observations and forecasts, but also of the makeup of weather itself. The pilot should know the dangers inherent in a thunderstorm, its associated turbulence, hail and lightening. He should know the difference between isolated or scattered thunderstorms and a squall line. He should know that scattered clouds over relatively flat country can easily become broken or overcast over mountainous terrain and thereby obscure mountain tops and

passes. He must know the effect of hills and mountains on wind flow and that treacherous turbulence and downdrafts in excess of 300 feet per second are not uncommon in these areas. He must know that there are conditions under which all the skill in the world could not save an aircraft from certain destruction. He must know and be must believe.

With this knowledge and belief, he is in a much better position to make a decision based on proper understanding and appreciation of weather factors gleaned from personal observation and the assistance of the forecaster. The pilot who is committed to a VFR type of operation must always guard against the dangerous temptation to take off and try for a closer look at the existing conditions. All too often, there is no turning back because the decision to do so is made too late and the weather has closed in behind him. In a sense, weather is no respecter of ratings and only the pilot who has acquired a true "Weather Sense" and adheres strictly to known personal and equipment limitations flies with safety.

JOHN P. WOODS NAMED EXEC. DIRECTOR OF NASAO

Lawrence E. McCabe, President of the National Association of State Aviation Officials, has announced the selection of John P. Woods as Executive Director of the Association, effective March 1, 1970.

Woods was employed by National Business Aircraft Association for the past eight years and served as Assistant Senior Director of Operations. He is recognized as an authority on air navigation, communications and air traffic control.

Woods is scheduled to succeed Col. A. B. McMullen, Executive Vice President of NASAO, upon his retirement in June, 1970. Col. McMullen, a veteran of over 50 years continuous service in both civil and military aviation, opened NASAO's Washington headquarters April 15, 1948. He has represented the association and its member state aviation agencies for the past 22 years.

The earth's rotation can be seen by astronauts on the moon. The earth appears to be four times larger than the moon as seen from earth.

PUBLICATIONS AVAILABLE FROM MAC

*Airport Directory	\$ 2.00
*Aeronautical Chart	1.00
TAP Report "Survey & Analysis, Air Transportation 1960-1980"	15.00
"An Introduction to General Aeronautics" (A Text for Aviation Science Courses) By Van Deventer	8.00
**"Professionalism in the Commercial Flight School" by C. A. Lynch50
**"Montana and the Sky", Monthly Newsletter (Subscription included with \$1.00 Pilot Registration Fee) or50
*Interim Airport Systems Plan	2.00
*The Businesslike Approach to Small-Shop Work Orders by C. A. Lynch (Single copies courtesy)50 or more

Note: All items in the first listing marked with a (*) are available to Libraries, Colleges and etc.—at no charge for single copies. Item with (**) is available on courtesy subscription to Libraries, Colleges and Aviation Organizations.

NO CHARGE ITEMS

MAC Annual Reports

Montana Aviation Laws and Regulations

Operating Rules of:

West Yellowstone Airport

Lincoln Airport

Browning Airport

Minimum Requirements for Airport Aeronautical Services

Minimum Requirements for Airport Aeronautical Services for Yellowstone Airport

Airport Leasing Guide

Weather/Flight Plan Logbook (Available to Airport Managers and Flight Operators)

Pilot Weather Log

Film Brochure

SARDA—Montana Plan for State and Regional Defense Airlift.

Cloud Charts (Available to Teachers)

How to Forecast the Weather Booklets (Available for Students).

Montana's Flying Classroom—Vo-Ag Booklet.

— AIRPORT AIDS —

Go-No-Go Charts (Available to Airport Managers/Flight Operators).

Density Altitude Charts (Available to Airport Managers/Flight Operators).

O-O-O-O-O-O-O-O-O-O

***"Montana and the Sky", By Frank W. Wiley—Beginning of Aviation in the Land of the Shining Mountains.

Deluxe Standard Edition	\$10.00
Rare Collector's Edition	50.00

***Order from the Montana Historical Society, 225 North Roberts Street, Helena, Montana 59601).

**ATTENTION:
NON-REGISTERED PILOTS**

All pilots residing in the state of Montana must register by April or be in violation of our state law.

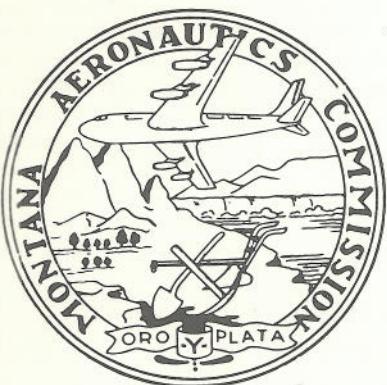
Safe Pilots Award Winner: First recipient of the National Pilots Association Safe Pilot Award is John Ryan, Executive Director of the Helicopter Association of America with 3700 accident free hours.

The oil industry is the largest single user of helicopters. The rotary wing aircraft are used mostly to transport workers and supplies to and from oil rigs located in off-shore ocean waters.

**MEMBER
NATIONAL ASSOCIATION OF STATE AVIATION OFFICIALS**

PURPOSE:—"To foster aviation, as an industry, as a mode of transportation for persons and property and as an arm of the national defense; to join with the Federal Government and other groups in research, development, and advancement of aviation; to develop uniform laws and regulations; and to otherwise encourage co-operation and mutual aid among the several states."

P. O. Box 1698
Helena, Montana 59601



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